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14 Attorneys for Plaintiffs
Autel Intelligent Technology Corp., Ltd. and Autel US Inc.

15
16 UNITED STATES DISTRICT COURT
17 CENTRAL DISTRICT OF CALIFORNIA
18 EASTERN DISTRICT
19

20 Autel Intelligent Technology Corp., Ltd.
and Autel US Inc. ,

21 Plaintiff,

22 v.

23 Shenzhen XTOOLTech Intelligent Co.,
24 Ltd. and XTOOLTech USA Inc.,

25 Defendant.
26
27
28

CASE NO.: 5:25-CV-1755

COMPLAINT

DEMAND FOR JURY TRIAL

1 Plaintiffs Autel Intelligent Technology Corp., Ltd. (“Autel Technology”) and
2 Autel US Inc., (“Autel, Inc.”) collectively, “Autel” or “Plaintiffs” by and through
3 their undersigned attorneys, Dorsey & Whitney, LLP, for their complaint against
4 Defendants Shenzhen XTOOLTech Intelligent Co. Ltd. (“XTOOL”) and
5 XTOOLTech USA, Inc. (“XTOOL USA”), collectively “Defendants”) allege the
6 following:

7 **NATURE OF THE ACTION AND SUMMARY OF RELIEF SOUGHT**

8 1. Plaintiffs bring this action against Defendants to stop Defendants’
9 unauthorized use, offers to sell, and sales within the United States, of Autel
10 Technology’s proprietary and patented technology that Autel Technology pioneered
11 in the automotive advanced diagnostics and testing field.

12 2. Defendants XTOOL and XTOOL USA are direct competitors of Autel
13 and are importing, offering for sale and selling within the United States the XTOOL
14 D8S Bidirectional Scan Tool (“XTOOL D8S”), an automotive diagnostic device
15 which copies and implements the patented technologies that Autel Technology
16 invented, deployed, and protected through years of investment and innovation.

17 3. On information and belief, despite their awareness of Autel
18 Technology’s patents for automobile diagnostic devices, diagnostic connection
19 devices and diagnostic methods, Defendants have continued to promote and deploy
20 XTOOL D8S in direct competition with Plaintiffs across the United States.

21 4. Defendants’ infringing conduct threatens to erode Plaintiffs’ hard-
22 earned competitive position, diminish their market share, and deprive them of the
23 exclusivity to which they are entitled in the United States under federal law.

24 6. Plaintiffs bring this action under the Patent Act, 35 U.S.C. §§ 271, 283-
25 285, to enjoin Defendants’ unlawful activities and to recover all damages and other
26 relief for Defendants’ past and ongoing acts of willful infringement.

27 **PARTIES**

28 7. Autel Technology is a corporation organized and existing under the laws

1 of the People's Republic of China with its principal place of business at Floor 2,
2 Caihong Keji Building, 36 Hi-tech North Six Road, Songpingshan Community, Xili
3 Sub-district, Nanshan District, Shenzhen City, China.

4 8. Autel Technology specializes in the research and development,
5 production, sales and service of automotive advanced diagnostics, detection and
6 analysis systems and electronic components. Autel Technology has been deeply
7 involved in the global automotive advanced diagnosis and testing field and is a leader
8 in advanced hardware, cloud services and mobile terminals. With operations across
9 North America, Europe and multiple international markets, Autel Technology's
10 patented technologies are used worldwide.

11 9. Autel US, Inc. is a wholly owned subsidiary of Autel Technology and is
12 a corporation organized and existing under the laws of the State of New York with
13 its principal place of business 36 Harbor Park Drive Port, Washington, New York,
14 USA 11050.

15 10. On information and belief, Defendant XTOOL is a corporation
16 organized and existing under the under the laws of the People's Republic of China
17 with its principal place of business 17&18/F, A2 Building, Creative City, Liuxian
18 Avenue, Nanshan District, Shenzhen, China.

19 11. On information and belief, XTOOL USA is a wholly owned subsidiary
20 of XTOOL and is a corporation organized and existing under the laws of the State of
21 California with its principal place of 4189 East Santa Ana Street, Suite A, Ontario,
22 CA 91761.

23 **JURISDICTION AND VENUE**

24 12. This is an action for patent infringement under the United States Patent
25 Act, specifically 35 U.S.C. § 271. This Court has subject matter jurisdiction over this
26 dispute pursuant to 28 U.S.C. §§ 1331 and 1338(a).

27 13. This Court has personal jurisdiction over XTOOL because XTOOL
28 conducts business in this Judicial District, and on information and belief has

1 committed acts of infringement within this Judicial District by selling and offering
2 to sell infringing automobile diagnostic devices.

3 14. This Court has personal jurisdiction over XTOOL USA because it
4 conducts business in this Judicial District, and on information and belief has
5 committed acts of infringement within this Judicial District by selling and offering
6 to sell infringing automobile diagnostic devices.

7 15. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400
8 because XTOOL is a not resident in the United States and has engaged, and continues
9 to engage, in infringing activity in this Judicial District, and XTOOL USA resides in
10 this Judicial District and continues to engage, in infringing activity in this Judicial
11 District.

12 **FACTUAL BACKGROUND**

13 **A. Autel Technology's Industry Leadership and Patent Portfolio**

14 16. Autel Technology was founded in 2004 and from its beginning has
15 engaged in research and development, production, sales and services of automotive
16 intelligent diagnostics and systems. In 2005 Autel introduced its first intelligent
17 OBD II Code reader and by 2011 it introduced its second-generation automotive
18 intelligent diagnostics system and became the first company in the industry to
19 develop its own Android operational system for intelligent diagnosis, cementing its
20 place as the industry leader. Today Autel Technology is a premier global
21 manufacturer and supplier of automotive advanced diagnostics, detection and
22 analysis systems and electronic components.

23 17. Autel invests heavily in research and development to continuously improve
24 its products and explore new technologies. To protect those innovations, Autel
25 invests in obtaining patent protection throughout the world for its innovative designs
26 and improvements. Virtual Patents | Autel . Such innovations, among others, include
27 Autel's MAXISYS, MAXICHECK, MAXITPMS and MAXIIM product lines which
28 Autel has publicly marked as protected by several patents, including U.S. Patent No.

11,845,451 (“the ‘451 Patent”). One such device is Autel’s MAXISYS ULTRA S2:




18. Autel Technology is the owner, by assignment of, the ‘451 Patent entitled “Automobile Diagnostic Method, Apparatus, Device and System, and Diagnostic Connection Device” issued December 19, 2023. It discloses and claims automotive diagnostic devices, diagnostic connections devices and methods that include reading an operation performed by a user, converting the operation into a diagnostic instruction, converting the diagnostic instruction into standard transmission data, and synchronously sending the standard transmission data through a connection device to an automobile network; and synchronously receiving standard transmission data corresponding to the detection data of the automobile network and converting the standard transmission data corresponding to the detection data into detection data. A true and correct copy of the ‘451 Patent is attached hereto as Exhibit 1.

B. XTOOL’s Infringing Conduct

20. XTOOL competes with Autel and has its own line of automotive diagnostic tools including XTOOL D8S:



21. The XTOOL D8S meet every limitation of claims 1, 5 and 11.

Elements of Claim 1	XTOOL D8S Bidirectional Scan Tool
1. An automobile diagnostic method for	
an automobile diagnostic device,	<p>The XTOOL D8S Bidirectional Scan Tool (the “Device”) is an <i>automobile diagnostic device</i>.¹</p> 

¹ XTool Amazon Product Page. <https://www.amazon.com/dp/B097R8Q122/> (“XTOOL D8S Bidirectional Scan Tool 2025 Upgraded Ver. of D8 Scanner, OBD2 Scanner Diagnostic Tool, Topology Mapping, ECU Coding, 38+ Resets, FCA, CAN FD&DoIP, All System Scanner for Car, 3-Year Update”) retrieved June 27, 2025.



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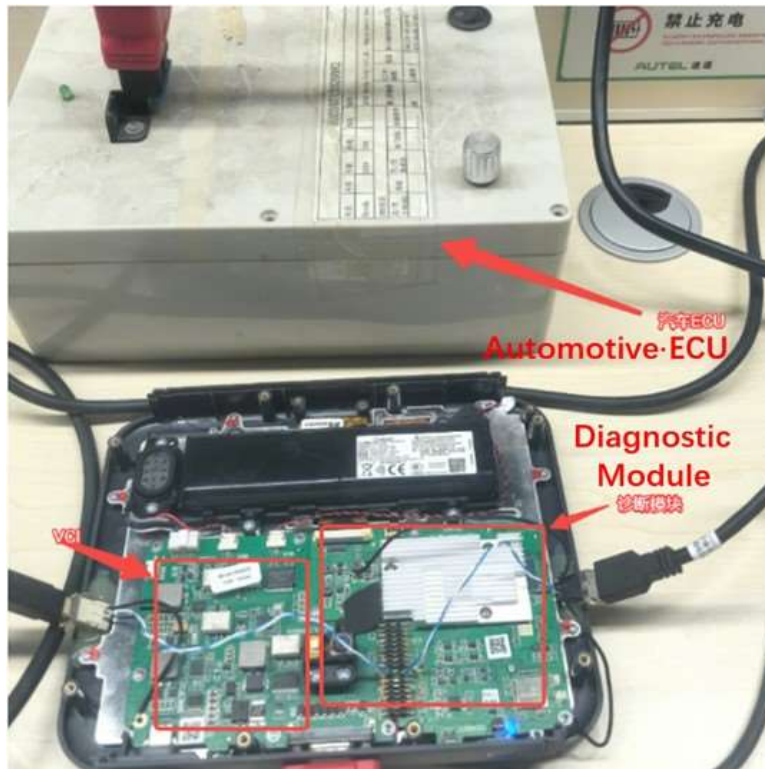
the automobile
diagnostic
device being
configured

The Device comprises a Vehicle Communication Interface (“VCI”) Module and a diagnostic Module (“Device Module”).

to connect a
diagnostic
connection
device

to obtain
detection data

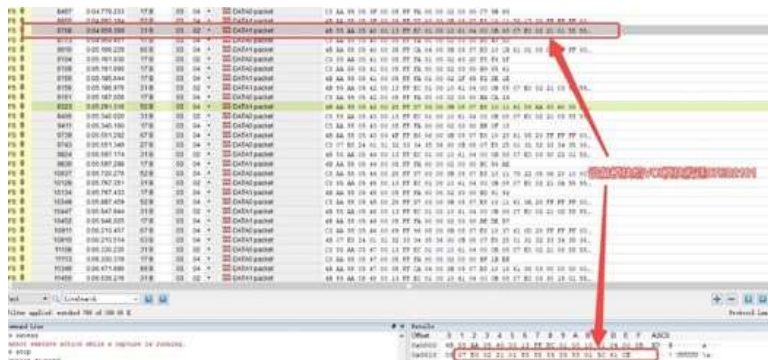
from an
automobile
network
through the
diagnostic
connection
device,



The Device is configured to *connect* the VCI—here *the diagnostic connection device*—to obtain detection data³ from

² *Id.*

³ User Manual at 29 (“Auto Reset is a bi-directional communication procedure directed by the service tool.”)

1		the <i>automobile network</i> ⁴ through the VCI.
2		The Device communicates with the vehicle. ⁵
3		wherein the diagnostic method comprises:
4	reading an operation performed by a user on an interface,	The Device has a touchable display that accepts input (<i>read an operation</i>) through a user's touch (by <i>a user</i>) on the display (<i>on an interface</i>) buttons that are used to input data. ⁶
5		
6		
7	and converting the operation into a corresponding diagnostic instruction;	The Device "can read ECU information, read and clear DTC and check living data and freeze frames [...] access the electronic control unit (ECU) of various vehicle control systems, including the engine, transmission, anti-lock braking system (ABS), airbag system (SRS), and perform kinds of actuation tests." ⁷ The Device "supports 5 basic diagnosis functions": "Read ECU Information," "Read/Clear Trouble Code," "Read Live Data," "Actuation Test (Bi-Directional Control)," and "Freeze Frame." ⁸
8		
9		
10		
11		
12		The Device must necessarily convert the user's input (<i>the operation</i>) into a diagnostic instruction.
13		
14	converting the diagnostic instruction into standard transmission data corresponding to the diagnostic instruction; and	The diagnostic instruction must necessarily be converted to standard transmission data to communicate with the automobile.
15		
16		
17		
18		
19		
20		
21		
22		The device module sends 07E02101 to the VCI module
23	sending the standard transmission	To obtain diagnostic or detection data from the automobile, the Device must request that information from the automobile network. Thus, the diagnostic instruction must be sent—as
24		

⁴ User Manual at 20 ("the scanner establishes communication with the vehicle").

⁵ User Manual at 25 ("VEHICLE CONNECTION The diagnosis operation needs to connect the D8 smart diagnosis system to a vehicle first so that the tablet can establish correct vehicle communication.")

⁶ User Manual at 17 (instructing the user to tap on the screen and further explaining that "[t]he main interface is mainly composed of Function Buttons and Navigation Buttons. The touch screen navigation is menu-driven, and you can quickly access functions by clicking on the option title and answering the dialogue window.")

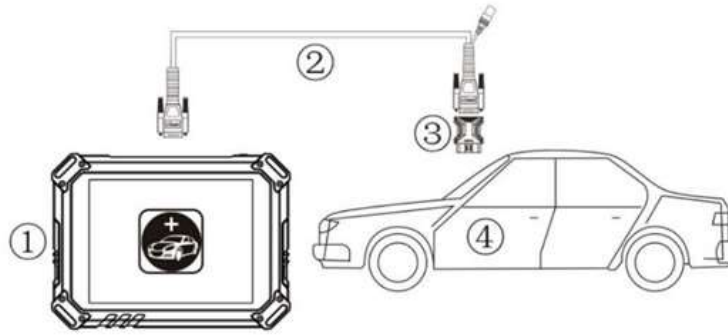
⁷ User Manual at 25.

⁸ User Manual at 32.

data
corresponding
to the diagnostic
instruction;

standard transmission data—to the automobile network.

The Device connects to the automobile network through OBD-II 16-pin diagnostic connector.⁹ See instructional image below, showing directions to connect the Device to the vehicle through a “Main Test Cable” and a OBM-II-16 diagnostic connector.

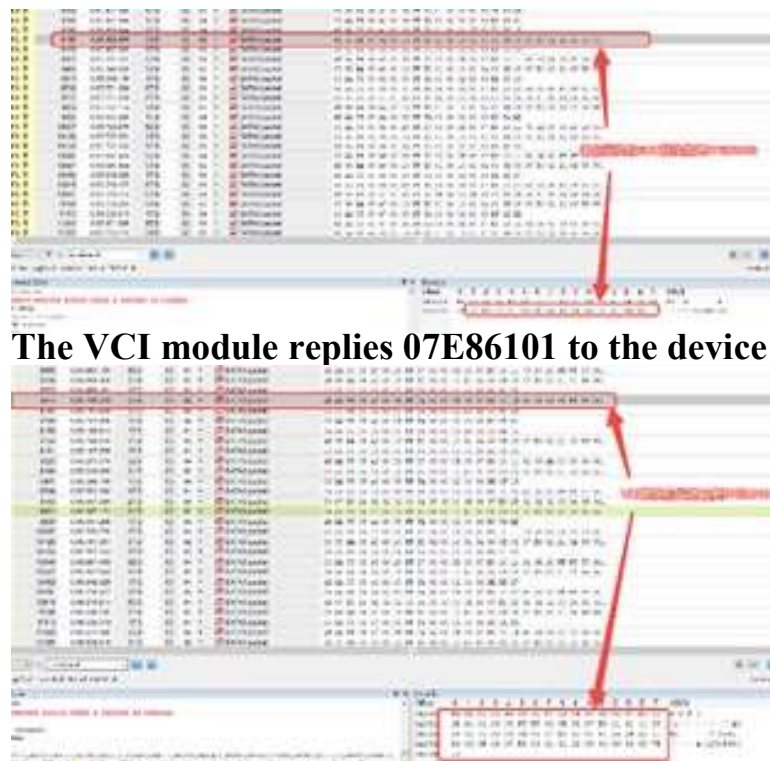


10

wherein the sending the standard transmission data corresponding to the diagnostic instruction comprises:

synchronously
sending the
standard
transmission
data
corresponding
to the diagnostic
instruction.

The transmission is synchronous.



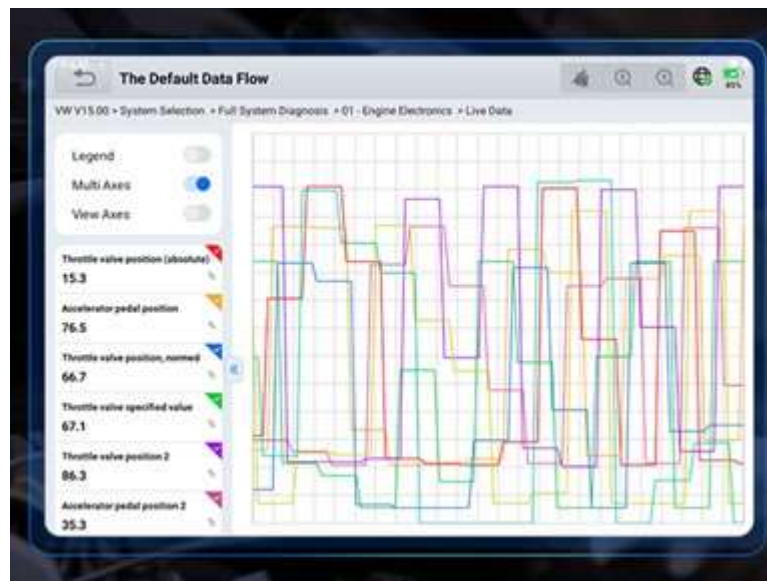
⁹ User Manual at 10 (Packing list including, under Test Connectors and Cables” category “OBD II-16”).

¹⁰ User Manual at 26. (showing the Device connected to the car through a “Main Test Cable” and “OBDII-16 Connector”)

The device module sends 07E02103 to the ECU module



11



12

The Device also reads live data. User Manual at 36-37. Synchronous transmission is typically used for transmission of live data.

¹¹ User Manual at 37.

¹² XTOOL Amazon Product Page, *supra* n. 1 (“Accurate Graphic Live Data > Instantly check the real-time status, highlighting any changes in your car.”)

<p>1 Elements of 2 Claim 5</p>	<p>XTOOL D8S Bidirectional Scan Tool</p>
<p>3 5. An automobile diagnostic method for</p>	
<p>4 an automobile 5 diagnostic 6 device</p>	<p>7 The XTOOL D8S Bidirectional Scan Tool (the “Device”) is 8 an <i>automobile diagnostic device</i>.¹³</p> <div data-bbox="573 449 1339 1701">  </div> <p>14</p>
<p>25 the automobile 26 diagnostic</p>	<p>The Device comprises a Vehicle Communication Interface</p>

¹³ XTool Amazon Product Page. <https://www.amazon.com/dp/B097R8Q122/>(“XTOOL D8S Bidirectional Scan Tool 2025 Upgraded Ver. of D8 Scanner, OBD2 Scanner Diagnostic Tool, Topology Mapping, ECU Coding, 38+ Resets, FCA, CAN FD&DoIP, All System Scanner for Car, 3-Year Update”) retrieved June 27, 2025.

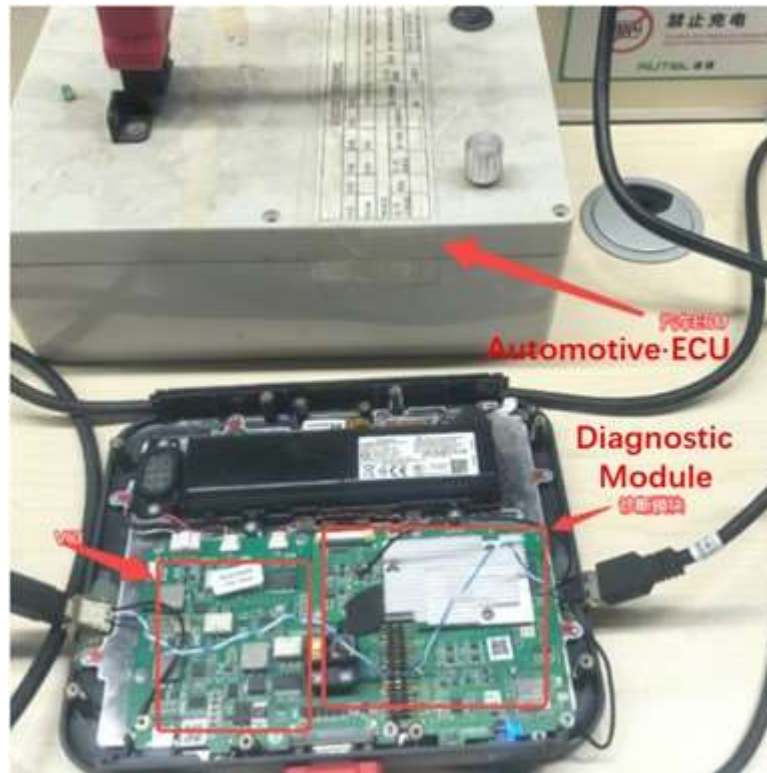
¹⁴ *Id.*

device being configured (“VCI”) Module and a diagnostic Module (“Device Module”).

to connect a diagnostic connection device

to obtain detection data

from an automobile network through the diagnostic connection device



The Device is configured to *connect* the VCI—here *the diagnostic connection device*—to obtain detection data¹⁵ from the *automobile network*¹⁶ through the VCI.

The Device communicates with the vehicle.¹⁷

wherein the diagnostic method comprises:

receiving standard transmission data corresponding to the detection data of the automobile network; and

The Device has a touchable display that accepts input (*read an operation*) through a user’s touch (by *a user*) on the display (*on an interface*) buttons that are used to input data.¹⁸

The Device “can read ECU information, read and clear DTC and check living data and freeze frames [. . .] access the electronic control unit (ECU) of various vehicle control systems, including the engine, transmission, anti-lock braking system (ABS), airbag system (SRS), and perform kinds of actuation tests.”¹⁹ The Device “supports 5 basic diagnosis functions”: “Read ECU Information,” “Read/Clear Trouble

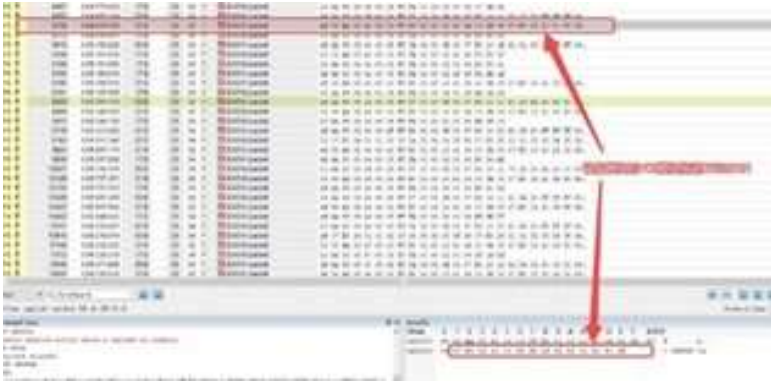
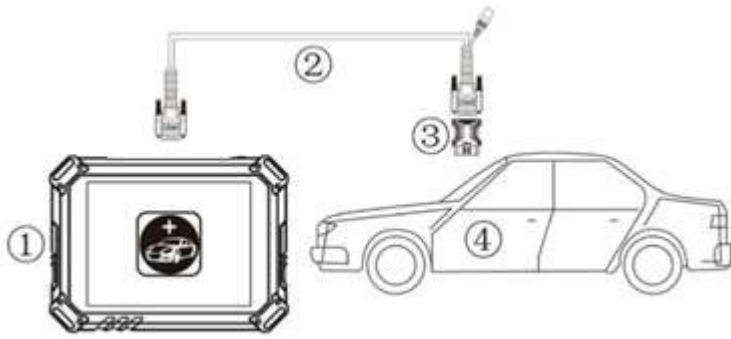
¹⁵ User Manual at 29 (“Auto Reset is a bi-directional communication procedure directed by the service tool.”)

¹⁶ User Manual at 20 (“the scanner establishes communication with the vehicle”).

¹⁷ User Manual at 25 (“VEHICLE CONNECTION The diagnosis operation needs to connect the D8 smart diagnosis system to a vehicle first so that the tablet can establish correct vehicle communication.”)

¹⁸ User Manual at 17 (instructing the user to tap on the screen and further explaining that “[t]he main interface is mainly composed of Function Buttons and Navigation Buttons. The touch screen navigation is menu-driven, and you can quickly access functions by clicking on the option title and answering the dialogue window.”)

¹⁹ User Manual at 25.

	<p>Code,” “Read Live Data,” “Actuation Test (Bi-Directional Control),” and “Freeze Frame.”²⁰</p> <p>The Device must necessarily convert the user’s input (<i>the operation</i>) into a diagnostic instruction.</p>
<p>converting the standard transmission data corresponding to the detection data into detection data;</p>	<p>The diagnostic instruction must necessarily be converted to standard transmission data to communicate with the automobile.</p>  <p>The device module sends 07E02101 to the VCI module</p>
<p>wherein the receiving standard transmission data corresponding to the detection data of the automobile network comprises:</p>	
<p>synchronously receiving the standard transmission data corresponding to the detection data of the automobile network.</p>	<p>To obtain diagnostic or detection data from the automobile, the Device must request that information from the automobile network. Thus, the diagnostic instruction must be sent—as standard transmission data—to the automobile network.</p> <p>The Device connects to the automobile network through OBD-II 16-pin diagnostic connector.²¹ See instructional image below, showing directions to connect the Device to the vehicle through a “Main Test Cable” and a OBM-II-16 diagnostic connector.</p> 

22

²⁰ User Manual at 32.


²¹ User Manual at 10 (Packing list including, under Test Connectors and Cables” category “OBD II-16”).

²² User Manual at 26 (showing the Device connected to the car through a “Main Test Cable” and “OBDII-16 Connector”)

The transmission is synchronous.

The VCI module replies 07E86101 to the device

The device module sends 07E02103 to the ECU module


<p>Elements of Claim 11</p>	<p>XTOOL D8S Bidirectional Scan Tool</p>
<p>An automobile diagnostic device, comprising</p>	<p>The XTOOL D8S Bidirectional Scan Tool (the “Device”) is an <i>automobile diagnostic device</i>.²³</p> 
<p>a display screen</p>	<p>The Device includes a <i>display screen</i>.²⁵</p>
<p>a first communication unit configured to send and receive data</p>	<p>The Device communicates with the vehicle.²⁶</p> <p>The Device must necessarily have a <i>first communication unit</i>, which must be able to both send and receive data</p>

²³ XTOOL Amazon Product Page. <https://www.amazon.com/dp/B097R8Q122/> (“XTOOL D8S Bidirectional Scan Tool 2025 Upgraded Ver. of D8 Scanner, OBD2 Scanner Diagnostic Tool, Topology Mapping, ECU Coding, 38+ Resets, FCA, CAN FD&DoIP, All System Scanner for Car, 3-Year Update”) retrieved June 27, 2025.

²⁴ *Id.*

²⁵ User Manual D8 Smart Diagnosis System (“User Manual”) at 6 (The front of the main unit is a touchable display screen, you can use your fingers to operate on the screen to complete the car diagnosis”); User Manual at 9 (Technical Specifications, including “Display: 8-inch capacitive, 1024×768 resolution”).

²⁶ User Manual at 25 (“VEHICLE CONNECTION The diagnosis operation needs to connect the D8 smart diagnosis system to a vehicle first so that the tablet can establish correct vehicle communication.”)

	<p>(configured to send and receive data). The Device “supports 5 basic diagnosis functions” including “Actuation Test (Bi-Directional Control.”²⁷ “Actuation test, also known as bidirectional control, is a generic term used to describe sending and receiving information between one device and another.”²⁸ See also Amazon Product Page image below, showing “commands” flowing from the Device to the car and “receiving” data from the car to the device.</p>  <p>The image shows a diagnostic tool interface with the heading "4000+ FULL BIDIRECTIONAL TEST". Below this, it lists "455 Locates the problem, saving significant time for the maintenance". There are four small images showing different tests: "E-VAP Test", "Fuel Pumps", "Wipes Test", and "Window/Mirror Test". Below these is a larger image of a white car with a hand holding the diagnostic tool. A red arrow labeled "Commands" points from the tool to the car, and a blue arrow labeled "Recieve" points from the car to the tool. At the bottom, there is a list of tests: "Injector Test", "Idle Air Control Valve Test", "HVAC Test", "Cooling Fan Test", "Throttle Position Actuator Test", "More ...", "A/C Compressor Test", and "Headlight/ Wiper/ Horn, etc".</p>
at least one processor	The Device contains at least one processor. User Manual at 9 (Technical Specifications lists “Processor Quad-core processor 1.8GHz.”)
a memory communicatively connected to the at least one processor, wherein	The Device includes memory: “RAM 2G ROM 64G” ³⁰ The memory and the at least one processor are necessarily communicatively coupled (<i>a memory communicatively connected to the at least one processor</i>). ³¹

²⁷User Manual at 32.

²⁸ User Manual at 38.

²⁹ XTOOL Amazon Product Page, *supra* n. 1.

³⁰ User Manual at 9 (Technical Specifications).

³¹ Demystifying PC Technology: RAM vs. Processor, *supra* n. 6

1 2 3 4 5 6	the memory stores an instruction that may be executed by the at least one processor, and when executed by the at least one processor, the instruction causes the at least one processor to	The memory necessarily stores an instruction that may be executed by the at least one processor and cause the processor to cause an action. ³²
7 8	read an operation performed by a user on an interface, and	The Device has a touchable display that accepts input (<i>read an operation</i>) through a user's touch (by <i>a user</i>) on the display (<i>on an interface</i>) buttons that are used to input data. ³³
9 10 11 12 13 14 15	converting the operation into a corresponding diagnostic instruction;	The Device "can read ECU information, read and clear DTC and check living data and freeze frames [. . .] access the electronic control unit (ECU) of various vehicle control systems, including the engine, transmission, anti-lock braking system (ABS), airbag system (SRS), and perform kinds of actuation tests." ³⁴ The Device "supports 5 basic diagnosis functions": "Read ECU Information," "Read/Clear Trouble Code," "Read Live Data," "Actuation Test (Bi-Directional Control)," and "Freeze Frame." ³⁵ The Device must necessarily convert the user's input (<i>the operation</i>) into a diagnostic instruction.
16 17 18 19	convert the diagnostic instruction into standard transmission data corresponding to the diagnostic instruction; and	The diagnostic instruction must necessarily be converted to standard transmission data to communicate with the automobile.
20 21 22 23 24	synchronously send the standard transmission data corresponding to the diagnostic instruction.	The standard transmission data must be sent to the automobile network. The Device connects to the automobile network through an OBD-II 16-pin diagnostic connector. ³⁶ See instructional image below, showing directions to connect the Device to the vehicle through a "Main Test Cable" and a OBM-II-16 diagnostic connector.

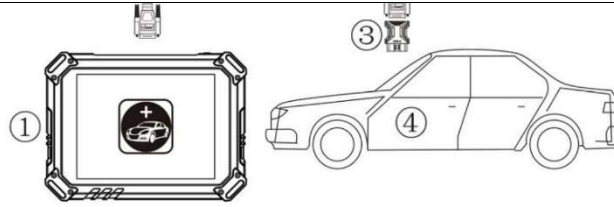
³² Demystifying PC Technology: RAM vs. Processor, *supra* n. 6

³³ User Manual at 17 (instructing the user to tap on the screen and further explaining that "[t]he main interface is mainly composed of Function Buttons and Navigation Buttons. The touch screen navigation is menu-driven, and you can quickly access functions by clicking on the option title and answering the dialogue window.")

³⁴ User Manual at 25.

³⁵ User Manual at 32.

³⁶ User Manual at 10 (Packing list including, under Test Connectors and Cables" category "OBD II-16").



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An OBM-II 16-pin diagnostic connector³⁸ can connect through at least ISO 15765.³⁹ A vehicle's electronic network leverages a CAN bus.⁴⁰ The transmission is synchronous.



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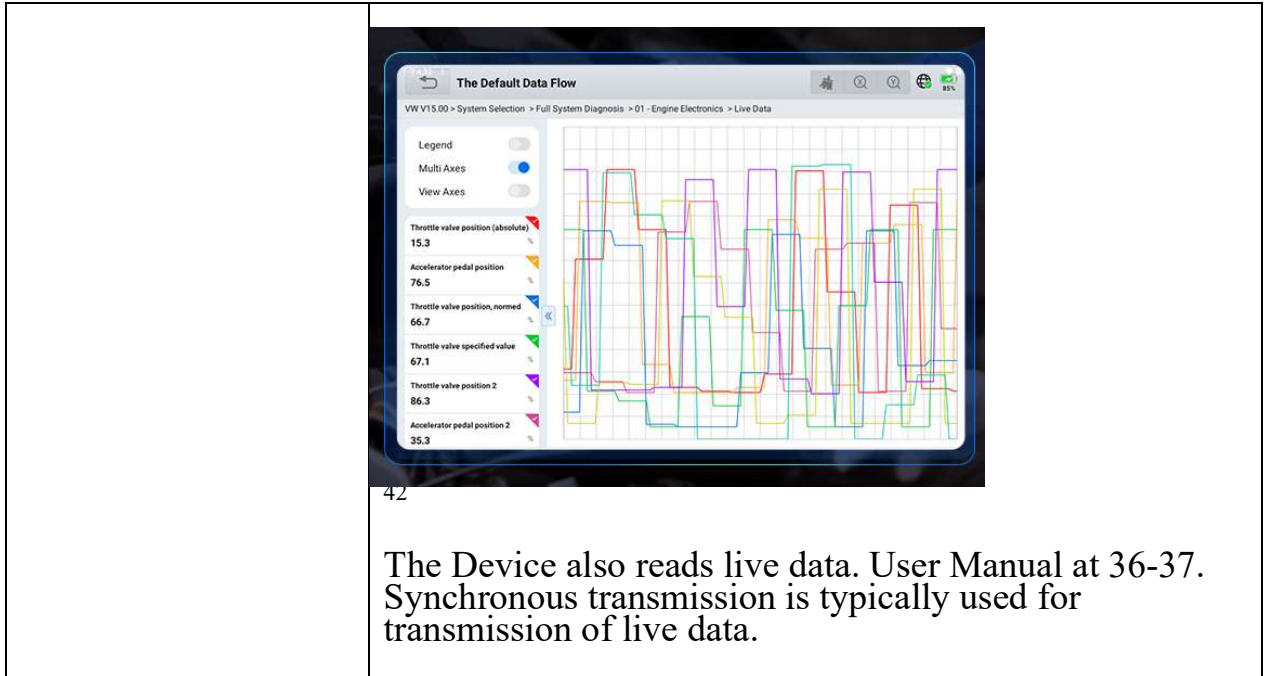
³⁷ User Manual at 26. (showing the Device connected to the car through a "Main Test Cable" and "OBDII-16 Connector")

³⁸ This is standardized. *See, e.g.*, <https://blog.semtech.com/obd-ii-systems-protocols-part-one> ("OBD-II Systems & Protocols"), retrieved May 12, 2025.

³⁹ This is an international standard for Diagnostic communication over Controller Area Network (DoCAN).

⁴⁰ This is well-established. *See, e.g.*, CAN bus, Wikipedia.org, https://en.wikipedia.org/wiki/CAN_bus, retrieved June 27, 2025.

⁴¹ User Manual at 37.



Count I - Infringement of the '451 Patent

(Against all Defendants)

22. Plaintiffs incorporate by reference the allegations in Paragraph 1 to 21 as if fully set forth herein.

23. On information and belief, XTOOL and XTOOL USA have directly infringed, and continue to directly infringe, at least claim 11 of the '451 Patent by making, using, offering to sell, selling, and/or importing into the United States the XTOOL D8S automotive diagnostic device and related components.

24. On information and belief, XTOOL and XTOOL USA also indirectly infringe at least claims 1 and 5 of the '451 Patent by inducing others to use the XTOOL D8S automotive diagnostic device in an infringing manner, including through instructions, marketing materials, and technical support provided to customers and end users.

⁴² XTOOL Amazon Product Page, *supra* n. 1 (“Accurate Graphic Live Data > Instantly check the real-time status, highlighting any changes in your car.”)

of enhanced damages pursuant to 35 U.S.C. § 284;

31. A finding that this case is exceptional and an award to Plaintiffs for their incurred attorneys' fees and costs pursuant to 35 U.S.C. § 285;

32. An award of pre-judgment and post-judgment interest and costs of suit; and

33. For any further relief that this Court deems equitable and just.

JURY DEMAND

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs demand a jury trial on all issues so triable.

Dated: July 11, 2025

DORSEY & WHITNEY LLP

By: /s/ Lynnda A. McGlinn

Faisal Zubairi
Lynnda A. McGlinn
Hui Shen
RJ Zayed
Attorneys for Plaintiffs
Autel Intelligent Technology Corp.,
Ltd. and Autel US Inc.